

MEDICAL DEVICE BALLOONS CONTAINING
THERMOPLASTIC ELASTOMERSABSTRACT

5 A dilatation balloon and catheter for insertion into a
bodily conduit. The catheter (10) includes shaft (12) and a
dilatation balloon (24) at the distal end of the shaft. The
balloon is inflated via a central lumen (14) in the shaft
for delivery of a fluid inflation media. The balloon is
10 fabricated from a combination of a thermoplastic elastomer
(TPE), preferably an engineering thermoplastic elastomer
(ETE), with a non-compliant structural polymeric material.
The combination may be a blend of the non-compliant
structural polymer and the TPE. Alternatively, the
15 combination may be a layered balloon having, for example, a
non-compliant structural polymer inner layer and a soft,
abrasion resistant, elastomeric outer layer. Methods for
fabricating the balloon from the combination of a TPE and a
non-compliant structural polymer are also disclosed.